

### **AMENDMENTS TO THE SPECIFICATION**

Please amend the sequence ID references as follows, so as to comply with the requirements as laid out in 37 C.F.R. §§1.821-1.825.

Please amend the paragraph starting on page 4, line 30 as follows:

Accordingly, the invention provides a nucleic acid comprising of a nucleic acid sequence selected from the group consisting of those shown in the ~~SEQ ID NOs 1 to 9~~ SEQ ID NO: 1 to SEQ ID NO: 9.

Please amend the sentence starting at page 5, line 2 as follows:

These are, for the purposes of the present invention, nucleic acids which show a range of a least 6, preferably at least 10, very preferably at least 15 and most preferably of all at least 20 consecutive nucleotides, which exhibit at least 60%, preferably at least 70%, very preferably at least 80%, even more preferably at least 90% and most preferably of all at least 95% sequence identity to the sequences selected from the group consisting of: ~~SEQ ID NO 1 to SEQ ID NO 9~~ SEQ ID NO: 1 to SEQ ID NO: 9, and which, in the test procedure described below, exhibit an anti-apoptotic activity of at least 50% inhibition index, preferably at least 60%, very preferably at least 70%, even more preferably at least 80%, more preferably still at least 90% and most preferably of all at least 95%.

Please amend the sentence starting at page 5, line 12 as follows:

A further embodiment of the present invention concerns nucleic acids where, in 5'- and/or 3' direction, nucleotides attach to a nucleic acid sequence selected from the group consisting of ~~SEQ ID NO 1 to SEQ ID NO 9~~ SEQ ID NO: 1 to SEQ ID NO: 9.

Please amend the paragraphs starting at page 8, line 23 as follows:

**Figure 1** shows a postulated secondary structure for ~~SEQ ID NO 2~~ SEQ ID NO: 2. Together with RNA sequence 5'-CGGAC GGGAC CAGAG GUGCC

GCUGU CCG-3' (SEQ ID NO: 10) the aptamer ~~SEQ ID NO: 2~~ SEQ ID NO: 2 forms the structure H1. This area with a helix (hairpin) structure (H1) is flanked by two RNA sections which can also form a helix structure called „helix F“. The synthesis of changed/mutated RNAs starting from aptamer 89 (~~SEQ ID NO: 2~~ SEQ ID NO: 2) shows whether the flanking sequences, which form helix F, are important for the function of the aptamer and whether aptamer 89 can be shortened while still keeping its function (~~SEQ ID NO: 4~~ SEQ ID NO: 4, example 7).

**Figure 2** shows a secondary structure calculated for ~~SEQ ID NO: 7~~ SEQ ID NO: 7. In the central part of the sequence (~~SEQ ID NO: 9~~ SEQ ID NO: 9), the structure possesses a hairpin loop (H2) which is supplemented by a further helix from the flanking sequences.

Please amend the sentence starting on page 11, line 3 as follows:

Starting from double-stranded DNA (60-70 pmol DNA), which contains the T7 promoter sequence of the bacteriophage T7 and, from the first transcribed nucleotide, a DNA copy of the desired aptamer RNA (e.g. for aptamer no. 89: DNA sequence „~~SEQ ID NO: 1~~“ (SEQ ID NO: 1), beginning with 5'-GGGAGAC...-3', see **example 2**), the aptamer RNAs are synthesized by the T7 RNA polymerase.

Please amend page 12, line 2 as follows:

1.) Sequences of DNA No. 89 (~~SEQ ID NO: 1~~ SEQ ID NO: 1)

Please amend page 12, line 5 as follows:

2.) RNA sequence of the pyrimidine-modified aptamer No.89 (~~SEQ ID NO: 2~~ SEQ ID NO: 2)

Please amend page 12, lines 9-10 as follows:

3.) RNA sequence of the core area of the pyrimidine-modified aptamer No.89 without flanking sequences (~~SEQ ID NO: 3~~ SEQ ID NO: 3)

Please amend page 12, line 13 as follows:

4.) RNA sequence of the aptamer mutant „89-2“ (58 nt) (~~SEQ ID NO 4~~  
~~SEQ ID NO: 4~~)

Please amend page 12, line 17 as follows:

5.) RNA sequence of the aptamer mutant No. 89-Z (30 nt) (~~SEQ ID NO~~  
~~5~~ ~~SEQ ID NO: 5~~)

Please amend page 12, line 20 as follows:

6.) Sequence of DNA No. 82 (~~SEQ ID NO 6~~ ~~SEQ ID NO: 6~~)

Please amend page 12, line 23, as follows:

7.) RNA sequence of the pyrimidine-modified aptamer No. 82 (~~SEQ ID~~  
~~NO 7~~ ~~SEQ ID NO: 7~~)

Please amend page 12, lines 27-28 as follows:

8.) RNA sequence of the core area of the pyrimidine-modified aptamer  
No. 82 without flanking sequences (~~SEQ ID NO 8~~ ~~SEQ ID NO: 8~~)

Please amend page 12, line 31 as follows:

9.) RNA sequence of the aptamer mutant No. 82-Z (30 nt) (~~SEQ ID~~  
~~NO 9~~ ~~SEQ ID NO: 9~~)

Please amend the abstract to delete the second period of the first sentence, so that it reads as follows:

The invention relates to anti-apoptotically active aptamers. [[. ]]The invention describes possible therapeutic and diagnostic applications for, among other things, treating arteriosclerosis, promoting the healing of wounds, treating

AIDS, cancer, Alzheimer's disease, systemic lupus erythematosus as well a  
rheumatoid arthritis and other chronic inflammatory diseases.

**AMENDMENT TO THE SEQUENCE LISTING**

Please replace the sequence listing submitting June 9, 2006, with a substitute sequence listing submitted herewith. The sequence listing is amended to include reference to and list SEQ ID NO: 10, as recited in the specification at page 8, line 24. This sequence was inadvertently excluded from the sequence listing supplied on June 9, 2006. No new matter is submitted with this amended sequence listing.